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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/018,396

03/20/2002

Yoon S. Cho-Chung

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05/03/2006

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EXAMINER

UNGAR, SUSAN NMN

ART UNIT

PAPER NUMBER

1642

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/018,396	Applicant(s) CHO-CHUNG, YOON S.	
	Examiner Susan Ungar	Art Unit 1642	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

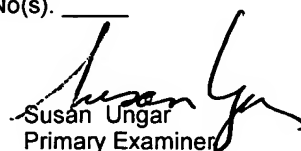
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: none.
- Claim(s) objected to: none.
- Claim(s) rejected: 1-8.
- Claim(s) withdrawn from consideration: none.

AFFIDAVIT OR OTHER EVIDENCE

8. ☒ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____


 Susan Ungar
 Primary Examiner
 Art Unit: 1642

Continuation of 11. does NOT place the application in condition for allowance because: 1. Claims 1-8 remain rejected under 35 USC 112, first paragraph for the reasons previously set forth in the paper mailed November 1, 2005, Section 4, pages 2-9.

Applicant argues that at the interview of December 20, 2005 Examiner made reference to a potential rejection of the claims on the basis that enzyme activity of PKA cannot be detected in urine and that the new grounds of rejection were not made of record. If the office wishes to reject the claims on new grounds, a non-final office action should be issued.

The argument has been considered but has not been found persuasive since Applicant is correct, there is no rejection of record drawn to PKA activity in urine. Examiner was simply discussing possible allowable material with Applicant's attorney and asking if PKA activity could be detected in urine in an effort to provide customer service as well as to advance prosecution. All of the claims are properly rejected for the reasons of record and no additional rejections are necessary to complete the rejections of the claims as currently constituted. Examiner apologizes for any inconvenience or misunderstanding and will be careful in the future to only discuss, with Applicant's attorney, allowable material drawn to specific limitations claimed and discussed in written office actions.

Applicant further states that since Examiner has indicated that claims directed to a method of diagnosing carcinoma in a patient comprising assaying the protein level of intracellular PKA in a body fluid using an antibody to the catalytic subunit of extracellular PKA would be acceptable, thus, Applicant understands that the Office no longer holds its former position that the application fails to provide a method for distinguishing extracellular PKA from other forms of PKA. The argument has been considered but has not been found persuasive because Applicant's statements are incorrect and again mischaracterize Examiner's position. The rejections of record stand for the reasons of record. The claims are not drawn to a method for distinguishing extracellular PKA from other forms of PKA, the claims are drawn to a method of diagnosing all forms of cancer in a patient comprising assaying any sample from said patient. Thus, Applicant appears to be arguing limitations not recited in the claims as currently constituted. In the interests of compact prosecution Examiner made clear, on the record, claim language that might be allowable in this Application. Examiner again apologizes for any inconvenience or misunderstanding and will be careful in the future to only discuss, with Applicant's attorney, allowable material drawn to specific limitations claimed and discussed in written office actions.

Applicant reiterates arguments drawn to the localization of extracellular PKA and states that no evidence is provided of significant contamination. The argument has been considered but has not been found persuasive given the teachings of the specification on page 9 of the specification.

Applicant argues that extra-cellular PKA is not activated by cAMP but intracellular PKA is activated by cAMP, thus the endogenous cAMP does not prevent one from distinguishing between extra-cellular and other forms of PKA on the basis of cAMP activation. The argument has been considered but has not been found persuasive as an activated catalytic cell unit, regardless of how it is activated would still be activated.

Applicant argues that Examiner presents no evidence in support of her hypothesis in response to Applicant's hypothesis. The argument has been considered but has not been found persuasive since Examiner never stated that the hypothesis was correct, only that it was as reasonable as Applicant's.

Applicant reiterates arguments that show that extra-cellular PKA activity is linked to increased expression in cancer cell lines and argues again that PKA expression is shed into culture medium and thus one would expect elevated serum extra-cellular PKA in serum. The argument has previously been considered but has not been found persuasive because the claims are not drawn to elevated serum extra-cellular PKA activity.

It is noted that Applicant has not addressed issues raised in the Final Rejection drawn to distinguishing membrane bound from ECPKA, does not address inability to assay ECPKA by determining the level of the R subunit, does not address lack of nexus between ECPKA activity and level, does not address the identity of the catalytic subunit of PKA/EctoPKA, does not address the teachings of Weber et al, does not address controls for ECPKA activity, does not address the apparent discrepancy between activity of normal controls and the instantly claimed activity level for controls, all discussed in pages 3-7 of the Final Rejection.

Applicant reiterates arguments drawn to non-fluid patient samples and argues that Examiner has redirected the argument by responding to the argument that no nexus has been established between activity level and the presence of elevated levels of ECPKA. The argument has been considered but has not been found persuasive because a review of the record reveals that Applicant again is incorrect and is mischaracterizing Examiner's response. Examiner did not redirect the argument and specifically and correctly responded to Applicant's argument drawn to fractionating solid samples where Applicant specifically argued that "...the example disclose culturing cells in a medium and testing the medium.... For PKA activity, thereby providing specific guidance." Applicant is clearly mischaracterizing both Examiner's response and Applicant's previous arguments.

Applicant argues that the references cited by Examiner drawn to different cancer types is not sufficient and that the evidence of ECPKA in a broad range of cancers is sufficient to enable the finding for all cancers and the evidence submitted in the Cho Declaration is sufficient to overcome the grounds of rejection. It is noted that Applicant's statements attempting to perfect the Cho Declaration, in the absence of a Declaration stating the facts, are not persuasive. The argument has been considered but has not been found persuasive for the reasons of record, and the Cho Declaration, drawn to cell line activity, is not persuasive for the reasons of record.

The arguments have been considered but have not been found persuasive and the rejection is maintained.

2. Claims 1-8 remain rejected under 35 USC 112, first paragraph for the reasons previously set forth in the paper mailed November 1, 2005, Section 5, pages 9-10.

Applicant states that Examiner indicted in the interview of December 20, 2005 that she had reconsidered her position as to written description and that she believed extra-cellular PKA was similar or identical to the catalytic subunit of PKA and that claims directed to the use of ECPKA protein and enzyme levels would be acceptable, implying that the written description rejection of the claims would not be maintained. Applicant's statement is again misleading and incorrect. Examiner never indicated that she had reconsidered her position as to written description or that claims directed to the use of ECPKA protein and enzyme levels would be acceptable. It is suggested that Applicant review the interview summary for said interview as well as Applicant's discussion of said interview where Applicant was clearly aware that what Examiner stated appeared to be allowable was the assay of body fluid for protein with an antibody to the catalytic domain of PKA. Examiner specifically put on the record that claims drawn to a method of diagnosing carcinoma in a patient wherein protein level is assessed in a body fluid with antibody to the catalytic subunit of PKA. Although the post filing art of record makes clear that ECPKA

is immunologically and biochemically identical to PKA catalytic subunit C alpha, at the time the invention was made, this was unknown. Examiner reiterates that the Application, as originally filed specifically teaches that ECPKA has been surprisingly and unexpectedly discovered (p. 3) and further teaches that antibody that distinguishes ECPKA from intracellular PKA and ectoPKA can be generated (p. 20). Given this teaching, at the time the invention was made, the identity of ECPKA and PKA catalytic subunit C alpha was unknown and therefore, at the time the invention was made, the specification as originally filed did not provide sufficient information to meet the written description requirements of 35 USC 112, first paragraph. This is especially true in view of the teaching that distinguishing antibody could be generated.

Applicant reiterates arguments stating that the claims are not directed to a novel protein. The arguments have been considered but have not been found persuasive for the reasons of record.

Applicant mischaracterizes the statements in the specification suggesting that the antibody referred to might be drawn to the regulatory subunit, rather than the catalytic subunit. It is suggested that Applicant review the specification at page 20, lines 26-28 wherein the specification proposes an antibody to the N terminal glycine of the Calpha subunit of ECPKA.

Applicant argues that the Office has not presented sufficient evidence of the lack of written description. The argument has been considered but not found persuasive given the teachings of the specification as originally filed and the post-filing reference. It is clear that the written description in the specification is not sufficient since Applicant is describing a product that appears not to exist, that is, one that is distinguishable from the Calpha subunit of intracellular PKA.

The arguments have been considered but have not been found persuasive for the reasons of record.

2. Claims 1-8 remain rejected under 35 USC 112, second paragraph for the reasons previously set forth in the paper mailed November 1, 2005, Section 6, page 10.

Applicant argues that Examiner did not address Applicant's arguments and reiterates arguments that the claims are definite. The argument has been considered but has not been found persuasive. Applicant again mischaracterizes Examiner's statements. Examiner clearly addressed the arguments and it is clear that if the limitations within the claims are not adequately described, the recitation of those limitations in the claims is indefinite. The arguments have been considered but have not been found persuasive and the rejection is maintained..